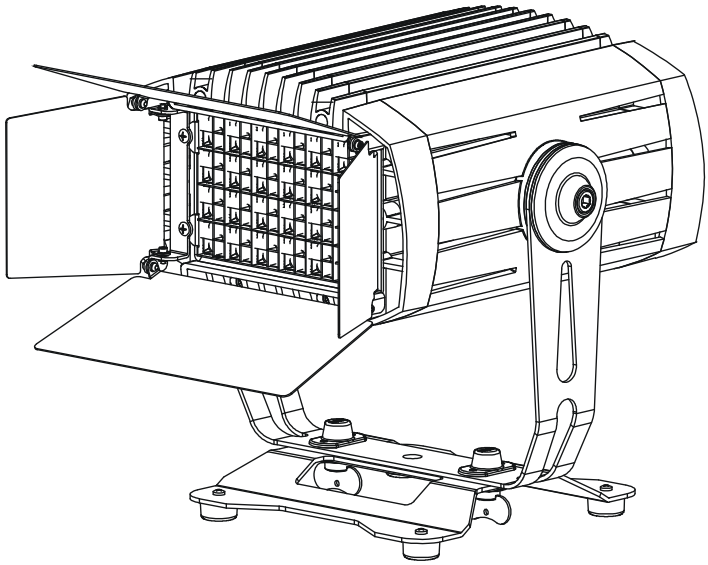
CitySource 96
CitySource 96/W

(SmartWhite)



USER MANUAL

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Version 1.5

Table of contents

1. Safety instructions 3
2. Fixture exterior view 5
3. Installation 5
3.1 Rigging the fixture 5
3.2 Connection to the mains 6
3.3 Changing the lens array 6
3.4 Installation of the barn-doors and top hat/half top hat 8
3.5 DMX 512 connection 8
3.6 Master/slave connection 9
3.7 Stand-alone operation 10
4. CitySource 96 (SmartWhite) - DMX protocol 11
5. Control menu map 12
6. Fixture menu 14
6.1 Fixture Address 14
6.2 Fixture information 15
6.3 Personality 16
6.4 Manual mode 16
6. 5 Test sequences 17
6.6 Stand-alone setting 17
6.7 Special functions 18
7. RDM 20
8. Wireless DMX operation 21
9. Error and information messages 21
10. Technical specifications 21
11. Cleaning and maintenance 24
12. ChangeLog 24

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE POWERING OR INSTALLING YOUR CitySource 96 !
Save it for future reference.

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

1. Safety instructions

DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT!

Make sure that the available voltage is not higher than stated on the rear panel of the fixture.
This fixture should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized distributor or local power company.

Always disconnect the fixture from AC power before cleaning, removing or installing the fuses, or any part.

Do not overload wall outlets and extension cords as this can result in fire or electric shock.

Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the power cord from time to time.

Do not install the unit near naked flames.

During the operation the housing becomes hot (up to 80°C)

Refer servicing to qualified service personnel.

<u>This fixture falls under protection class I</u>. Therefore this fixture has to be connected to a mains socket outlet with a protective earthing connection.

Do not connect this fixture to a dimmer pack.

LED light emission. Risk of eye injury.
Do not look straight at the fixture´s LEDs during operation. The intense light beam may damage your eyes.

Keep compustible materials at least 30 cm away from the fixture.

If the fixture has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Do not shake the fixture. Avoid brute force when installing or operating the fixture.

This fixture was designed for indoor and outdoor use.

When choosing the installation spot, please make sure that the fixture is not exposed to extreme heat or dust.

Avoid using the unit in locations subject to possible impacts.

The fixture body never must be covered with cloth or other materials.

Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Do not block the front objective LEDs with any object when the fixture is under operation.

The fixture becomes very hot during operation. Allow the fixture to cool approximately 30 minutes prior to manipulate with it.

Operate the fixture only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the fixture. Most damages are the result of unprofessional operation!

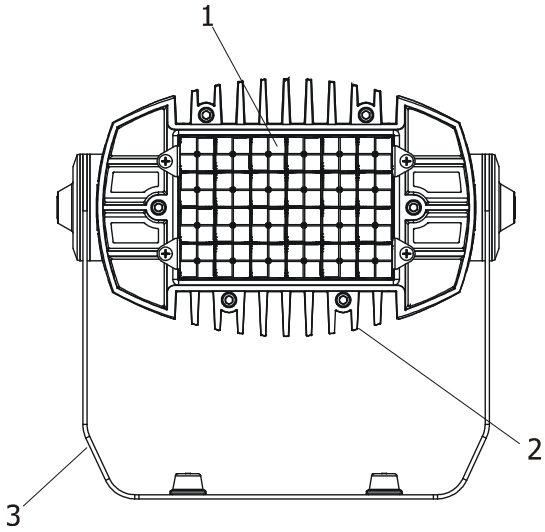
Do not attempt to dismantle or modify the unit.

Please consider that unauthorized modifications on the fixture are forbidden due to safety reasons!

Please use the original packaging if the fixture is to be transported.

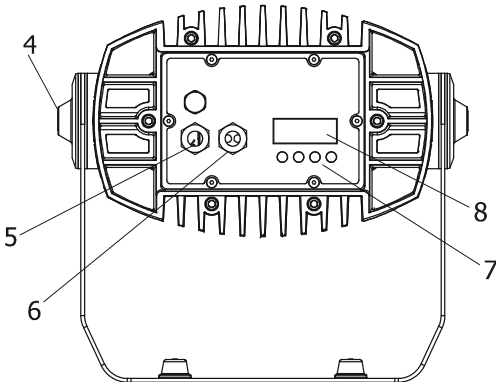
If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock etc.

2. Fixture exterior view

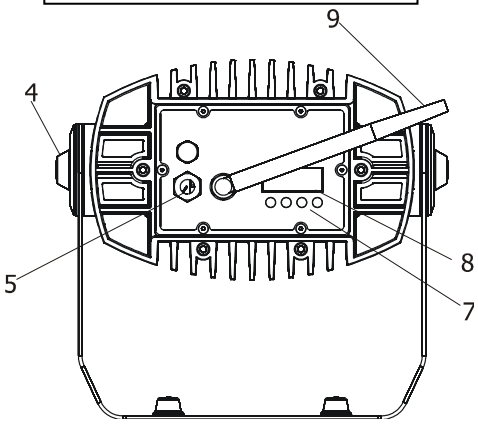


1. Lens array
2. Radiator
3. Mounting bracket

4. Tilt-lock screw
5. Power cable
6. Data cable (DMX in/out)
7. Control buttons
8. LED display
9. Antenna



Standard version



Wireles DMX version

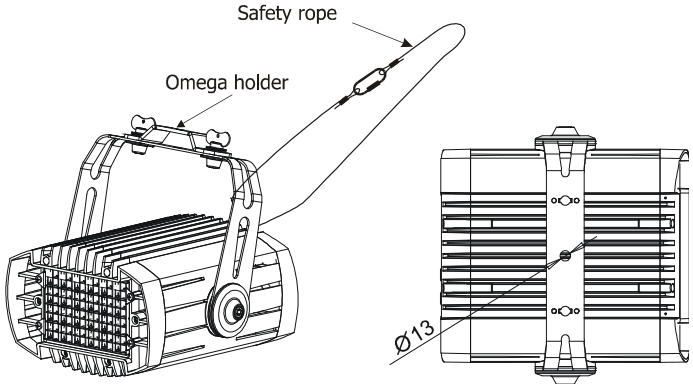
3. Installation

Warning for wireless DMX version of the CitySource96!
The antenna must be instaled on the fixture to keep declared IP rating of the fixture!

3.1 Rigging the fixture

Ensure that the structure (truss) to which you are attaching the fixture is secure

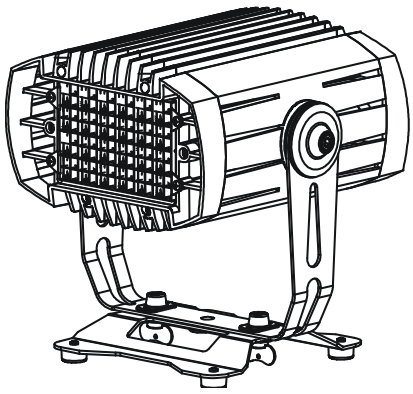
The fixture can be rigged in any orientation on a truss via the omega holder without altering its operation characteristics. The mounting bracket allows to adjust desired fixture position (0°-360°). The mounting hole in the mounting bracket has a diameter of 13 mm.



IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury or damage to property.
For overhead use, always install a safety rope that can hold at least 10 times the weight of the fixture. You must only use safety ropes with screw-on carbines. Pull the safety-rope through the mounting bracket and over the trussing system etc. Insert the end in the carbine and tighten the fixation screw.

Caution: Fixtures may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the device.

The fixture can also stand directly on the flat surface (e.g. stage) by means of the removable stand:



3.2 Connection to the mains

Fixtures must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulation.

Install a suitable plug on the power cord, note that the cores in the power cord are colored according to the following table.

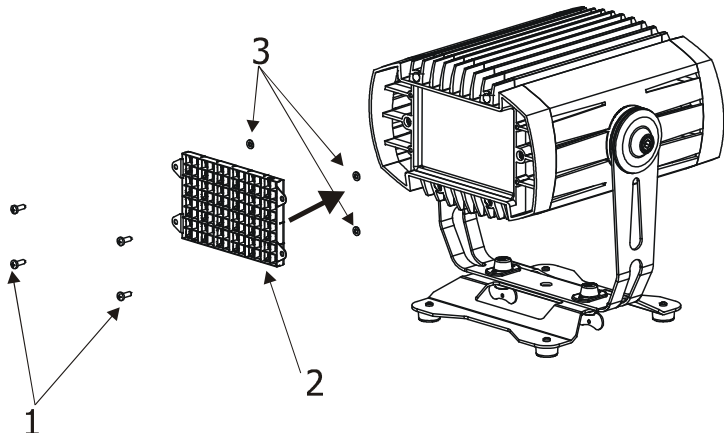
Core (Eu)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⏚

This device falls under class one and must be grounded!

3.3 Changing the lens array

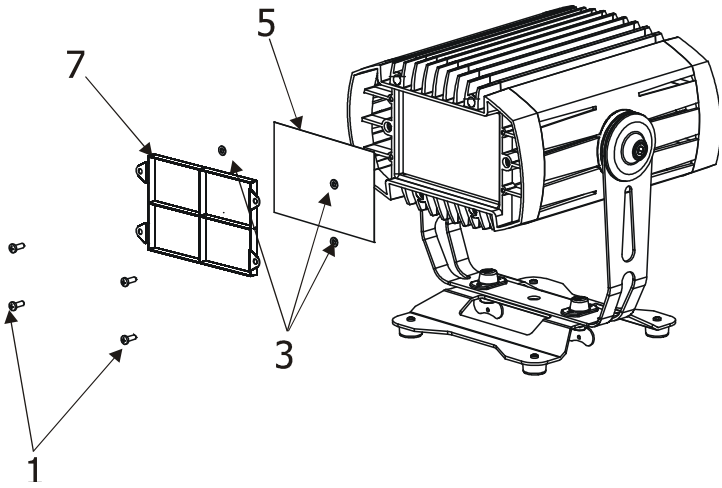
The standard beam angle of the fixture without lens-array is 12°.
If you need a wider beam angle than 12° , you have to install the eggcrate lens module 25° or the optional eggcrate lens modules: 45°, 32°x12° or eggcrate top hat (for placing frost foil under it).
How to install eggcrate lens module:

1. Disconnect the fixture from the mains.
2. Place the new eggcrate lens module (2) on the front side of the fixture and screw it to the housing by means of the four M5x14 screws (1) with washers (3).



You can install a frost foil under the eggcrate top hat to get frost light output.

1. Disconnect the fixture from the mains.
2. Uninstall the eggcrate lens module 25° (2) as described above.
3. Place the frost foil (6) under the the eggcrate top hat (7) and secure it by means of the four screws (1) and washers (3) on the fixture.



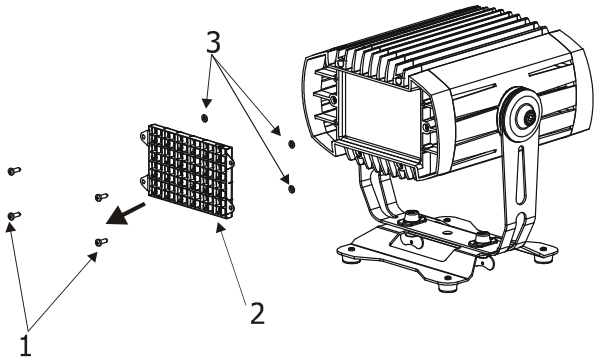
The dimension of the frost foil is 154mm x 103mm, max. thickness= 0.5mm.

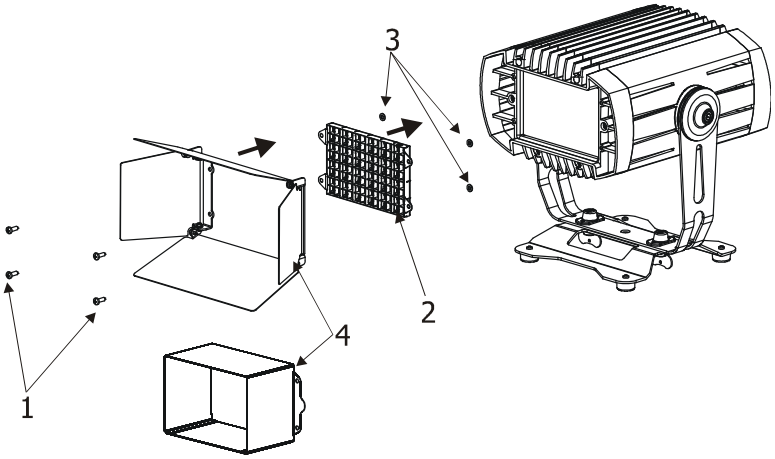
The frost foil has to stand temperature of 85°C.

3.4 Installation of the barn-doors and top hat/half top hat

You can install the barn-doors or top hat/half top hat to better define illuminated surface.

1. Disconnect the fixture from the mains.
2. Remove the eggcrate lens module 25°(2) by unscrewing the four M5x14 screws (1) including washers (3).
3. Place the barn-doors module (4) or top hat/half top hat on the eggcrate lens module 25° (2) and screw them on the fixture using four M5x14 screws (1) and washers (3) as shown on the picture below.





Never close the barn-doors during fixture operation

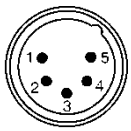
3.5 DMX 512 connection

The fixture is equipped with two 5-pin XLR connectors for DMX input/output. Only use a shielded twisted-pair cable designed for RS-485 and 5-pin XLR- connectors in order to connect the controller with the fixture or one fixture with another.

Wiring of the XLR connectors:

DMX output
XLR socket (rear view):

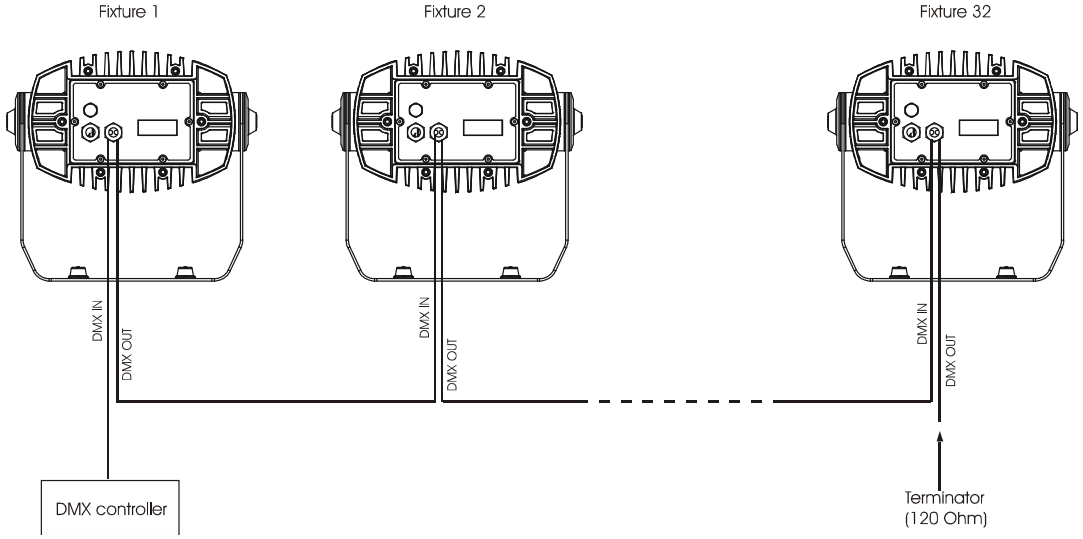
DMX input
XLR plug (rear view):



1 – Shield **2** - Signal (-) **3** - Signal (+) **4** – Not connected **5** – Not connected

To build a DMX chain

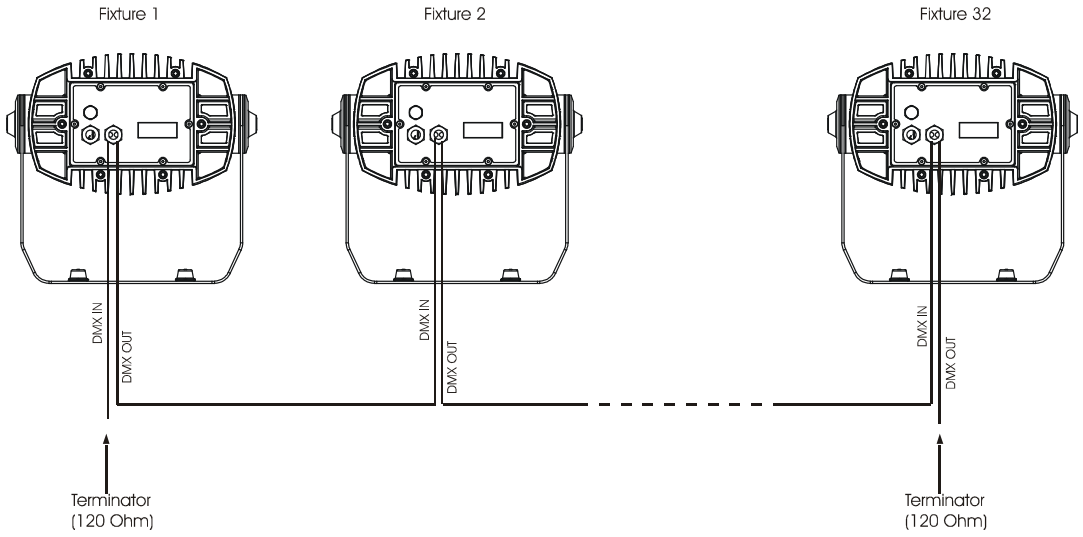
1. Connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX chain.
2. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture.
3. Always connect the DMX output with the input of the next fixture until all fixtures are connected. Do not overload the link. Max. 32 fixtures may be connected on a DMX link.



Caution: Terminate the link by installing a termination plug in the output of the last fixture. The termination plug is a male 5-pin XLR plug with a 120 Ohm resistor soldered between Signal (–) and Signal (+).

3.6 Master/slave connection

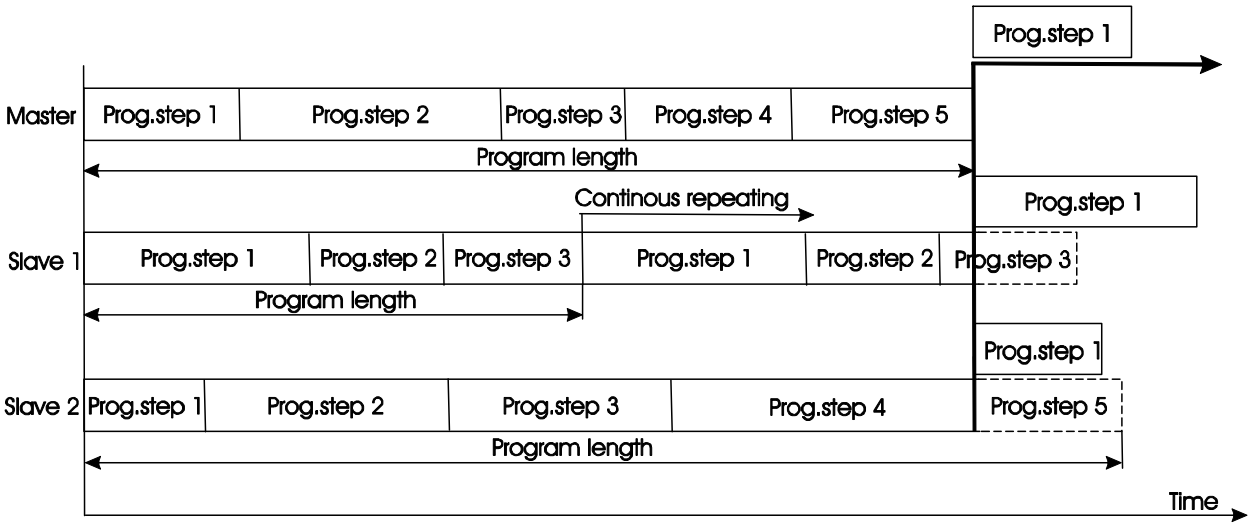
To build a master/slave-chain:
Connect the DMX output of the master fixture in the data chain with the DMX input of the first slave. Always connect output with the input of the next slave until all slaves are connected (up to 32 fixtures).



Caution: It is necessary to terminate the input of the master fixture and the output of the last slave with a 120 Ohm resistor in order to ensure the proper transmission on the data link.

3.7 Stand-alone operation

The fixtures on a data link are not connected to the controller but can execute pre-set programs which can be different for every fixture. To set the program to be played, see the "Stand-alone setting" **(**menu **"St.AL."**).
"Stand-alone operation" can be applied to the single fixture or to multiple fixtures operating synchronously. Synchronous operation of multiple fixtures requires that they must be connected on a data link and one of them is set as a master (master mode) and the rest as the slaves (slave mode).
To set the fixture as the master or slave, see the " Fixture Address " (menu "**A001"**).
Only one fixture can be set as the master.
The master fixture starts simultaneous program start in the other slave fixtures. All fixtures have a definite, synchronized starting point when playing back their programs. The number of running program is the same in all slaves and depends on the master's choice (menu "**St.AL.**"). Every fixture runs its program repeatedly, starting the program step No.1 when requested by the master.
Example:
If the slave fixture has a shorter program length, it will continuously repeat its program until the master fixture finishes its own program and restarts its program running (slave 1- prog.step 3 will not be finished).
If the slave fixture has a longer program length, it will restart at prog. step 1 before it completes all its prog.steps (slave 2 - prog.step 5 will not be played)- see the picture bellow.



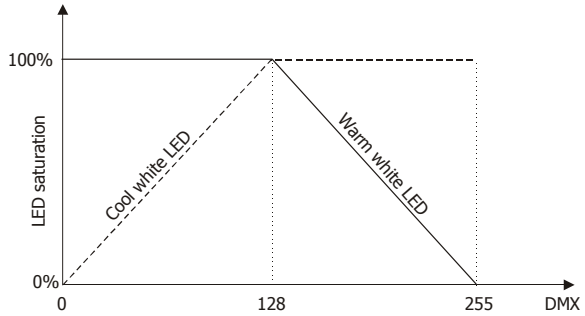
Note: Disconnect the fixtures from the DMX controller before master/slave operating, otherwise data collisions can occur and the fixtures will not work properly!

4. CitySource 96 (SmartWhite) - DMX protocol

Version 1.0

Mode				Value	Function	Type of control
1	2	3	4			
1	-	1	-	0 - 255	**Warm white –both LED arrays** Warm white LEDs saturation control (0-100%)	proportional
2	-	2	-	0 - 255	**Cool white – both LED arrays** Cool white LEDs saturation control (0-100%)	proportional
-	-	-	1	0 - 255	**Warm white –LED array 1** Warm white LEDs saturation control (0-100%)	proportional
-	-	-	2	0 - 255	**Cool white –LED array 1** Cool white LEDs saturation control (0-100%)	proportional
-	-	-	3	0 - 255	**Warm white –LED array 2** Warm white LEDs saturation control (0-100%)	proportional
-	-	-	4	0 - 255	**Cool white –LED array 2** Cool white LEDs saturation control (0-100%)	proportional
-	1	-	-	0-127 128-255	**Ratio control – both LED arrays*** 100% Warm white LEDs saturation, cool white LEDs saturation 0%-->100% 100% Cool white LEDs saturation, warm white LEDs saturation 100%-->0%	step proportional step proportional
-	-	3	5		**Strobe –both LED arrays**	
				0-31	Shutter closed	step
				32-63	Shutter open	step
				64-95	Strobe-effect from slow to fast	proportional
				96-127	Shutter open	step
				128-143	Opening pulses in sequences slow--> fast	proportional
				144-159	Closing pulses in sequences fast --> slow	proportional
				160-191	Shutter open	step
				192-223	Random strobe-effects from slow to fast	proportional
				224-255	Shutter open	step
-	2	4	6	0 - 255	**Dimmer–both LED arrays** Dimmer intensity from 0% to 100%	proportional
-	-	5	7	0 - 255	**Dimmer fine–both LED arrays** Fine dimmer intensity from low to high	proportional

*Ratio control:



5. Control menu map

Default settings=Bold print

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
A001	dM.Ad.	001-512			
	MA.SL.	d.AbL			
		MASt.			
		SLA			
InFo	Poti.	FuLL	totL		
			rSEt		
		EcO	totL		
			rSEt		
	DM.In.	WWh.1	0-255		
		:			
		F.dim	0-255		
	tEMP.	Cur.t.	boAr.		
			LEdS		
		Hi.tE.	boAr.		
			LEdS		
		rSEt	boAr.		
			LEdS		
	VErS.	IC1			
PErS	dM.Pr.	**Mod.1**			
		Mod.2			
		Mod.3			
		Mod.4			
	dISP.	d.On	**On**, Off		
		d.Int.	20...**100**		
		turn			

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
	tEM.U.	**°C**, °F			
	LOAd	**FuLL**			
		EcO			
	In.Po.	WWh.1	0-255		
		:			
		F.dim	0-255		
		Stor.			
	hOLd	On, **Off**			
	dFSE				
MAn.M.	PrE.C.	WWh.1	WW01..WW.03		
		:			
		dimr	di.01...di.06		
	Man.C.	rEd1	0-255		
		:			
		F.dim	0-255		
tESt					
St.AL.	Auto	**Off**			
		tESt			
		PrG.1			
		:			
		PrG.3			
	PLAY	tESt			
		PrG.1			
		:			
		PrG.3			
	Edit	PrG.1	St.01	P.End	1-68
		:	:	WWh.1	0-255
		PrG.3	St.68	:	:

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
				S.tim.	0-25.5 sec
				CoPY	
SPEC.	rdML				
	rdMH				
	Adj.	DMH	WWh.1		
			:		
			F.dimr		
		CaL.U.	WWh.1		
			:		
			CWh.2		
			Stor.		
	rAdI*	r.InF.	No.LI (0-100)		
		r.UnL.			
	uPd.				

* Only for wireless DMX version

6. Fixture menu

The control panel menu allows to set the fixture according to your needs, obtain information on its operation, test its various parts and lastly program it, if it has to be used in a Stand-alone mode.

The four control buttons on the front have the following functions:
↙ **- ESCAPE** button-leaves menu without saving changes.
↵ **- ENTER** button- enters menu, confirms adjusted values and leaves menu.
▲ **- UP** and ▼ - **DOWN** buttons - move between menu items on the same level, sets values.

After switching the fixture on, the fixture display shows the current DMX address:

Use the UP/DOWN buttons to scroll through the various menu items. To select desired item, press the ENTER.

6.1 Fixture Address

Use this menu to set the DMX address of the fixture or set the fixture as a Master (Slave).
dM.Ad. --- **DMX addressing**. Select this submenu to set a DMX start address.
To set a DMX address.

1. Use the UP/DOWN buttons to find " **A001**" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select desired start address.

4. Press the ENTER button to confirm the choice.

MA.SL. --- Master/slave addressing. Select this submenu to set the fixture as a master or slave. Option "**d.AbL**" deactivates master/slave setting.
To set a fixture as a master or slave.

1. Use the UP/DOWN buttons to find “A001“ menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select “ **MA.SL.**“ item.
4. Press the ENTER button.
5. Use the UP/DOWN buttons to select either master (MASt) or slave (SLA)
6. Press the ENTER button to confirm the choice.

Note: After switching on, the CitySource 96will automatically detect whether DMX 512 data is received or not. If there is no data received at the DMX input, the display will start to flash with actually set address.

6.2 Fixture information

Use this menu to read useful information about the fixture status.
To display desired information.

1. Use the UP/DOWN buttons to find the “ InFo“ menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select the required menu item.
4. Press the ENTER button to confirm the choice.

Po.ti. --- **Power On Time.** Use the menu item to read the number of operation hours for each LEDs operating mode.

FuLL---Max light output from the fixture.

totL - the function shows the total number of the operation hours in the “FuLL” mode since the CitySource 96 has been fabricated.

rESEt - the function shows the number of the operation hours that the CitySource 96 has been powered on in the “FuLL” mode since the counter was last reset. In order to reset this counter to 0 you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

EcO---Economical mode.

totL - the function shows the total number of the operation hours in the “EcO” mode since the CitySource 96 has been fabricated.

rESEt - the function shows the number of the operation hours that the CitySource 96 has been powered on in the “EcO” mode since the counter was last reset. In order to reset this counter to 0 you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

DM.In.---**DMX values**. Select this function to read DMX values of each channel received by the fixture.

tEMP --- **Fixture Temperatures.** Select this menu to read the temperatures of the fixture:

Cur.t. --- the current temperature of the fixture inside.

Hi.tE. - the menu item shows the max. temperatures of the fixture inside since the CitySource 96has been fabricated.

rSEt --- the menu item shows the maximum temperatures of the fixture inside since the counter was last reset. In order to reset this counter to 0 you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

Note: The ambient temperature should not exceed 40°C.

Measuring points:

LEdS.--- the temperature of the LEDs module.

boAr. --- the temperature on the PCB in the fixture base.

The temperatures can be displayed in either °C or °F units - see option “tEM.U“ in the menu “Pers“.

VErS. ---**Software Versions.** Select this function to read the software version of the fixture processor.

6.3 Personality

Use this menu to modify the CitySource 96operating behaviour.

DM.Pr. --- **DMX preset**. Select this menu item to set a desired DMX mode. Please refer to the chapter "DMX protocol" for detail description of each DMX mode.

DiSP. --- **Display adjusting**. This function allows you to change the display settings.

d.On --- this function allows you to keep the display on or to turn off automatically 2 minutes after last pressing any button on the control panel.

d.Int. --- select this function to adjust the display intensity (20-min.,100-max.).

turn --- select this function to turn the display by 180°.

tEM.U. --- **Temperature Unit.** Use this menu in order to display the fixture temperatures in desired units: °C or °F.

LoAd --- **Load of LEDs**. The menu allows to choose 2 different operating modes for fixture´s LEDs.

FuLL --- Maximum light output

EcO. --- The light output is decreased by 25%.

In.Po. --- **Init effect positions.** Use this function to set all effects to the desired positions to which they will move after switching the fixture on (if DMX is not being received).

hoLd --- **Holding DMX values**. The menu allows to choose behaviour of the fixture if receiving of DMX signal is breaked.

On --- fixture keeps last received DMX values in memory until new DMX values are not received.

Off --- light output is closed if receiving DMX signal is interrupted.

Note: After switching the fixture on without connected DMX, values set in the menu “In.Po.” will be loaded into fixture´s memory.

dF.SE. --- **Default Settings .**The menu item sets all fixture parameters to the default (factory) values.

6.4 Manual mode

Use this menu for control the fixture without connected DMX console.

PrE.C. --- Preset effects control. Select this menu to call up preset positions of the channel effects.

Man.C. --- Manual effect control. Select this menu to control all channels via buttons of the control board.

To control fixture channels.

1. Use the UP/DOWN buttons to find “ Man.C“ menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select desired effect (channel).

List of control channels:
"WWh.1" – warm white LEDs saturations-array1
"CWh1" – cool white LEDs saturations-array1
"WWh.2" – warm white LEDs saturations-array2
"CWh2" – cool white LEDs saturations-array2
"Stro." - a strobe, shutter
"dimr" - a dimmer
"F.dim" – a fine dimmer

4. Press the ENTER button and use the UP/DOWN buttons to set value , press the ENTER button to confirm it.

6. 5 Test sequences

Use this menu to run demo-test sequences without an external controller, which will show you some possibilities of using the CitySource 96.

6.6 Stand-alone setting

The fixtures on a data link are not connected to the controller but can execute pre-set programs which can be different for every fixture. "Stand-alone operation" can be applied to the single fixture or to multiple fixtures operating synchronously.
Synchronous operation of multiple fixtures requires that they must be connected on a data link and one of them is set as a master ("MASt") and the rest as the slaves ("SLA"). Up to 32 fixtures can be connected in a master/slave chain. Only one fixture can be set as the master.
Note: Disconnect the fixtures from the DMX controller before master/slave operating, otherwise data collisions can occur and the fixtures will not work properly. See the chapters "Stand-alone operation" and " Master/slave connection".

Auto. --- Automatic playback. This function allows you to select the program which will be played after switching the fixture on. Selected program will be played continuously in a loop.

1. Use the UP/DOWN buttons to find " **St.AL.**" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select " **Auto**" item.
4. Press the ENTER button.
5. Use the UP/DOWN buttons to select desired program.
6. Press the ENTER button to confirm the choice.

PLAY --- Playing program. By enter to this menu a complete overview of all programs is offered, from which the program to be run can be selected.

1. Use the UP/DOWN buttons to find " **St.AL.**" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select desired program.
4. Press the ENTER button. The selected program runs in a loop.

Edit --- Editing a program. The fixture offers 3 freely editable programs (EPG.1-EPG.3) each up to 68 steps. Every program step includes a fade time-the time taken by the step´s channel status to reach the desired level and a step time-the total time occupied by the step in the program.
E.g. If "F.tim."=5 second and "S.tim."=20 second, effects will go to the desired position during 5 seconds and after that they will stay in this position for 15 seconds before going to the next prog. step

1. 1. Use the UP/DOWN buttons to find " **St.AL.**" menu and press the ENTER button.
2. Use the UP/DOWN buttons to select "**Edit**" menu and press the ENTER button.
3. Use the UP/DOWN buttons to select a program you want to edit (PrG.1-PrG.3 and press ENTER button.
4. Use the UP/DOWN buttons to select a desired program step ("St.01" - "St.68") and press ENTER button.
5. Use the UP/DOWN buttons to select a channel you want to edit and press the ENTER button.
   List of editable items:
   "P.End" - a total number of the program steps (value 1-68). This value should be set before start Programming (e.g. if you want to create program with 10 steps, set P.End=10).
   "Wh.1"- "Wh.2"- a warm white LEDs saturation array1/array2 (0-255)
   "CWh.1"-"CWh.2" - a cool white LEDs saturation array1/array2 (0-255)
   "Stro." - a strobe, shutter (0-255)
   "dimr" - a dimmer (0-255)
   "F.dim"- a fine dimmer (0-255)
   "F.tim."- a fade time, (0-25.5) seconds
   "S.tim."- step time, value (0-25.5) seconds
   "COPY". – this item duplicates the current prog. step to the next prog. step. The item "P.End" is increased automatically.

6. Use the UP/DOWN buttons to set a DMX value of the channel and then press the ENTER button.
7. Use the UP/DOWN buttons to select next channel and press the ENTER button.
8. After having set all channels in the current program step, press the MODE button to go by one menu level back and select another program step.

6.7 Special functions

rdML --- **Code**.This menu item shows the first part of the RDM identification code.

rdMH --- **Code**. This menu item shows the second part of the RDM identification code.

AdJ --- **Effect Adjustment.** The menu allows calibration of each LEDs array.
dMH --- **DMX Values.** The menu item enables to control all LEDs before calibrating each LEDs array.
CAL.U --- **Calibrating unit.** The menu serves for fine current calibration of LEDs during fixture burn-in at a factory. Each LED array can be calibrated separately. Users should not change the setting.

rAdI --- **Wireless DMX.** The menu serves for reading of the wireless operation status (only for wireless DMX version).
r.InF. --- **Wireless DMX information.** The menu item shows level of received signal in %. If the fixture is not linked to the transmitter, "**no.LI**" is displayed.
r.UnL. --- **Wireless DMX unlink.** The item serves for unlinking the fixture from transmitter

uPd.M. --- **Updating mode**. The menu item allows you to update software in the fixture via either serial or USB port of PC.
The following are required in order to update software:
- PC running Windows 95/98/2000/XP or Linux
- DMX Software Uploader
- Flash cable RS232/DMX No.13050624 (if you want to use a serial port of PC)
- Robe Universal Interface (if you want to use an USB port of PC)

Note1: Software update should execute a qualified person. If you lack qualification, do not attempt the update yourself and ask for help your ROBE distributor.
Note 2: DMX address, programs 1-3 and all items in the menu "PErS" will be set to their default values.

To update software in the fixture:

I. Installation of the DMX Software Uploader.

1. DMX Software Uploader program is available from the ROBE web site at WWW.robe.cz.
2. Make a new directory (e.g. Robe_Uploader) on your hard disk and download the software to it.
3. Unpack the program from the archive.

.

II. Fixture software updating.

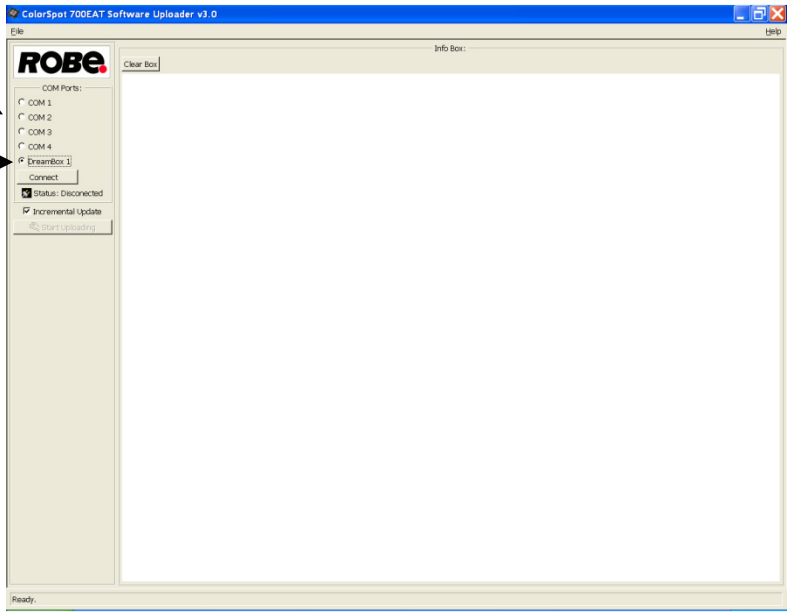
1. Determine which of your port is available on your PC and connect it:
   - with the DMX input of the fixture if you using the flash cable RS232/DMX
   - with the DMX input of the Robe Universal Interface if you using the USB cable.

   Disconnect the fixture from the other fixtures in a DMX chain. Turn both the computer and the fixture on. Make sure the lamp is switched off (only if the fixture involves a lamp).
2. Switch the fixture to the updating mode:
   1 Use the UP/DOWN buttons to find "**SPEC.**" menu.
   2 Press the ENTER button.
   3 Use the UP/DOWN buttons to select " **uPd.**" item.
   4 Press the ENTER button
   5 Use the UP/DOWN buttons to select " **yES**" option
   6 Press the ENTER button

   Note: If you do not want to continue in software update, you have to switch off and on the fixture to escape from this menu.
3. We recommend to cancel all running programs before start of the Software Uploader.
4. Run the Software Uploader program. Select desired COM and then click on the Connect button.

Select COM if the seriál port is used.

Select DreamBox1 if the USB port is used.



If the connection is OK, click on the Start Uploading button to start uploading. It will take several minutes to perform software update. If the option "Incremental Update" is not checked, all processors will be updated (including processors with the same software version).

If you wish to update only later versions of processors, check the Incremental Update box.

Avoid interrupting the process. Update status is being displayed in the Info Box window.

When the update is finished, the line with the text "The fixture is successfully updated'will appear in this window and the fixture will reset with the new software.

Note: In the case of an interruption of the upload process (e.g. power cut), the fixture keeps the updating mode and you have to repeat the software update again.

For example: The fixture was switched off before finishing software upload. After switching again the fixture on, the fixture is still in the updating mode and the display is dark. Restart the Software Uploader program and repeat software update from your PC.

7. RDM

This fixture is ready for RDM operation.RDM (Remote Device Management) is a bi-directional communications protocol for use in DMX512 control systems, it is the new open standard for DMX512 device configuration and status monitoring.
The RDM protocol allows data packets to be inserted into a DMX512 data stream without adversely affecting existing non-RDM equipment. By using a special „Start Code," and by complying with the timing specifications for DMX512, the RDM protocol allows a console or dedicated RDM controller to send commands to and receive messages from specific moving lights.
RDM allows explicit commands to be sent to a device and responses to be received from it.
The list of commands for CitySource 96 is the following.

Parameter ID	**Discovery command**	**SET command**	**GET command**
DISC_UNIQUE_BRANCH	*		
DISC_MUTE	*		
DISC_UN_MUTE	*		
DEVICE_INFO			*
SUPPORTED_PARAMETERS			*
SOFTWARE_VERSION_LABEL			*
DMX_START_ADDRESS		*	*
IDENTIFY_DEVICE		*	*
DEVICE_MODEL_DESCRIPTION			*
MANUFACTURER_LABEL			*
DEVICE_LABEL		*	*
SENSOR_DEFINITION			*
SENSOR_VALUE			*
DISPLAY_LEVEL		*	*
DEVICE_RESET		*	
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
STATUS_MESSAGES			*
STATUS_ID_DESCRIPTION			*
DEVICE_HOURS			*

8. Wireless DMX operation

The wireless version of the CitySource 96 is equipped with the Lumen Radio CRMX module and antenna for receiving DMX signal. CRMX module operates on the 2.4 GHz band.

To link the fixture with DMX transmitter.
The fixture can be only linked with the transmitter by running the link procedure at DMX transmitter .
After linking , the level of DMX signal (0-100 %) is displayed in the menu item "r**.InF**" (SPEC-->rAdI.--> r.InF.)

To unlink the fixture from DMX transmitter.
The fixture can be unlinked from receiver via the menu item " r**.UnL**." (SPEC-->rAdI.--> r.UnL.).

9. Error and information messages

t.M.Er.(Temperature measuring error)
The message informs you that the LED module temperature sensor is defective.

MA.Er. (Master error)
The fixture is set as a master and DMX console is connected to the fixture.

10. Technical specifications

Power supply

- Electronic auto-ranging
- Input voltage: 100 - 240V AC, 50-60 Hz
- Fuse: T3.15 A H
- Power consumption:

Power mode	Max. power consumption (All LED channels at full)	Typical power consumption (2 LED Channels at full)	Ambient Temperature
Full mode	200W (225VA)	145W	25°C
Eco mode	115W (140VA)	100W	

Optic & Effects

- Light source: 96 Luxeon Rebel LEDs (WW,CW)
- Optical system: 12° standard lens-array, 25° egg-crate module included; 45°and 32°x12°egg crate modules optionally available
- Fitting of additional frost foil filters
- Adjustable strobe sequences
- Lumen maintenance:

Channels @ full intensity	Power mode	L_{70}
Two LED channels	Full mode	70,000
	Eco mode	80,000
All LED channels	Full mode	60,000
	Eco mode	70,000

L_{70} = 70% maintenance of initial lumen output in hours

Control

- 4-digit LED display and four control buttons
- USITT DMX 512 (RDM support)
- DMX protocol modes: 4 (2, 5, 7 control channels)
- Control: DMX 512, RDM support

- Operations modes: DMX, Stand-alone, Master/Slave
- Manual control of all effects via control panel
- 3 user editable programs each up to 68 steps

Wireless DMX/RDM module (only for Wireles DMX version)

- Compliance with USITT DMX-512 (1986 & 1990) and 512-A
- Full DMX fidelity and frame integrity
- Auto sensing of DMX frame rate and frame size
- <5ms DMX latency
- Operational frequency range of 2402-2480 MHz
- Producer: LumenRadio

Strobe

- Strobe effect with variable speed (max. 20 flashes per second)
- Pre-programmed random strobe pulse-effects

Dimmer

- Smooth 16-bit dimming from 0 - 100 %

Connection

- DMX data in: 1.3m long cabel with 5-pin XLR (male)*
- DMX data out: 1.3m long cabel with 5-pin XLR (female)*
- Power: 1.4m long power cabel without plug

*Wire DMX only

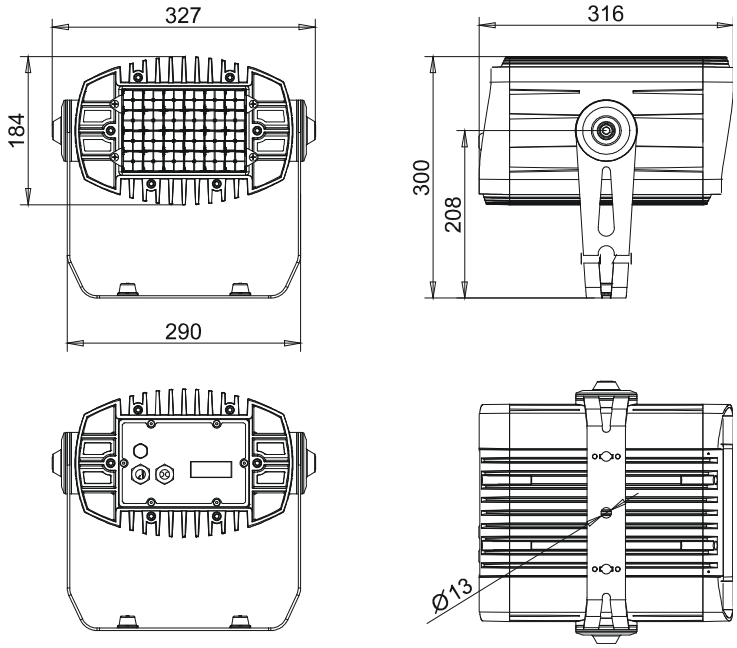
Rigging

- Via omega holder

Temperatures

- Maximum ambient temperature: 40° C
- Maximum housing temperature: 80° C

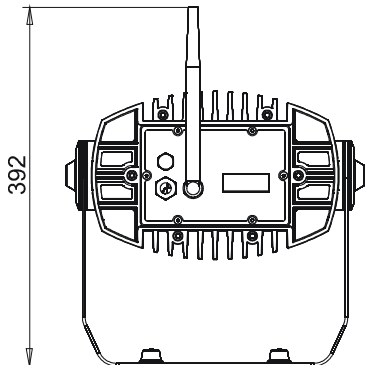
Dimensions (mm) CitySource 96



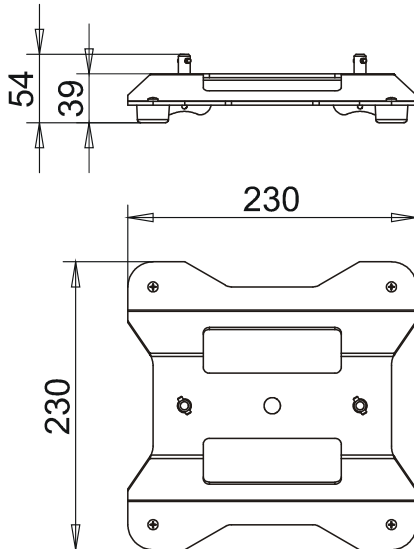
Weight

- 11 kg

Wireless DMX Version



Removable floor stand



Weight

- 1.2 kg

Protection factor

- IP 65 (except DMX IN/OUT connectors)

Included items

- 1 x CitySource 96 (CitySource 96/W)
- 1 x Eggcrate lens module 25° (No. 10980067)
- 1 x omega holder (No. 99010420)
- 1 x Removable floor stand (No.99512731)
- 1 x User manual

Optional accessories

- 1 x Barn-dors (No.10980063)
- Eggcrate lens module 45° (No. 10980068)
- Eggcrate lens module 32°x12° (No. 10980069)
- Eggcrate top hat module (without lenses) (No. 10980092)
- Top hat (No.10980077)
- Half top hat (No.10980078)
- Single top-loader case (without castors) (No.10120085)
- Dual top-loader case (No.10120087)
- Quad top-loader case (No.10120086)
- Flash cable RS232/DMX (No. 13050624)

11. Cleaning and maintenance

DANGER ! ***Disconnect from the mains before starting any cleaning or maintenance work***

Rinse off loose dirt with low pressure water spray. Wash the housing with a soft brush or sponge and a mild, non-abrasive washing detergent. Rinse it.
Maintenance and service operations are only to be carried out by a qualified person.
Should you need any spare parts, please use genuine parts.

12. ChangeLog

This section summarizes all changes in the user manual.

Version of manual	**Date of issue**	**Description of changes**
1.5	28/11/2012	Item "hOLd", added in menu "PErS".

Specifications are subject to change without notice.

March 6, 2015